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PROCEEDINGS
OF THE
AMERICAN PHILOSOPHICAL SOCIETY
HELD AT PHILADELPHIA FOR PROMOTING USEFUL KNOWLEDGE.

VOL. XXXIV.

DECEMBER, 1895.

No. 149.

Stated Meeting, May 17, 1895.

President, Mr. FRALEY, in the Chair.

Correspondence was submitted as follows:

A letter from the Academie R. des Sciences, Lisbon, Portugal, announcing the death of its Secretary, Prof. Manuel Pinheiro Chagas, April 8, 1895.

An invitation from the New Jersey Historical Society, Newark, to the American Philosophical Society, to participate in the celebration of its semi-centennial anniversary, Thursday, May 16, 1895.

Letters of envoy were received from the Observatoire Physique Central, St. Petersburg, Russia; Royal Statistical Society, Zoölogical Society, London, England; Massachusetts Institute of Technology, Boston.

Letters of acknowledgment were received from the R. Accademia dei Lincei, Rome, Italy (145); Botanical Society of Canada, Halifax, N.S. (146); Massachusetts Institute of Technology, Boston (111-114, 116-126); American Antiquarian Society, Worcester, Mass. (143, 146); University of the City of New York (143, 146); Mr. James C. Carter, New York, N. Y. (119, 143).

Accessions to the Library were reported from the Royal Asiatic Society (Straits Branch), Singapore; Government Museum, Madras, India; Institut Égyptien, Cairo; Société

Impériale des Naturalistes, Moscow, Russia; Comité Géologique, Observatoire Physique Central, St. Petersburg, Russia; Anthropologische Gesellschaft, Vienna, Austria; K. P. Geologische Landesanstalt und Bergakademie, Berlin, Prussia; Zoölogical and Geological Societies, London, England; Natural History Society, Montreal, Canada; Agricultural Experiment Station, Amherst, Mass.; Messrs. Wharton Barker, John F. Lewis, Philadelphia; Agricultural Experiment Station, Agricultural College, Miss.; Texas Academy of Science, Austin; Observatorio Meteorológico Central, Instituto Médico Nacional, Mexico, Mexico; Observatorio Astronómico y Meteorológico, San Salvador, C. A.

A photograph for the Society's album was received from Mr. Julius F. Sachse, Philadelphia.

The following deaths were announced:

Prof. Carl Vogt, Geneva, Switzerland: b. July 5, 1817; d. May 5, 1895.

Hon. Eckley B. Coxe, Drifton, Pa.: b. June 4, 1839; d. May 13, 1895.

After the reading of the minutes and the correspondence and donations, it was moved that the order of business be suspended in order that the election of members be proceeded with. Carried.

The names of the nominees were then read and spoken to.

On motion, a recess was taken in order to give members an opportunity to vote.

In accordance with the By-Laws, the Secretaries acted as tellers for the election.

After the recess, Mr. C. Stuart Patterson made a report from the Committee on the Henry M. Phillips Prize Essay, and offered the following resolution:

Resolved, That after the award signed by the judges to whom were referred the essays submitted under the terms of the circular of May 1, 1893, in competition for the Henry M. Phillips Prize, shall have been presented to the President of the Society, the sealed envelopes containing the names of the competitors shall be opened by the President and Treasurer of the Society, or either of them. Carried.

The following motion was offered by Mr. Price, and adopted:

Resolved, That when the official report and certificate of the Committee of Judges of the Henry M. Phillips Prize Essays shall be received, and the President and Treasurer shall open the envelopes and find the name of the person entitled to the prize for the crowned essay, the Treasurer be authorized to pay him the prize of five hundred dollars from the Phillips Fund.

An obituary notice of Prof. Henry Coppée by Mr. J. G. Rosengarten was read by title.

An obituary notice of Dr. W. S. W. Ruschenberger was read by Dr. Brinton.

Mr. Bache read a paper for the *Proceedings* on "Personal Equation."

He said that, in order to fix the fact of his priority in what he believes to be the discovery, that personal equation, or relative reaction time of individuals, as it is variously called, is related to race, he should like to state the final results of some experiments which he has lately had made. From auditory, visual, and tactile tests, applied to thirty-three different individuals, represented by Whites, Indians and Negroes, divided into their three classes, consisting respectively of 12, 11, and 10 individuals, comprising in the aggregate 990 observations, giving the reaction time of these individuals by the several tests, as recorded by electro-magnetic apparatus, are derived the following final means, to the nearest thousandth of a second.

	AUDITORY.	VISUAL.	TACTILE.
White.....	147	165	136
Indian	116	136	115
Negro	130	153	123

The superior quickness of the Negro, as compared with the White is, therefore, so far as these figures show, given by the following figures of differences.

AUDITORY.	VISUAL.	TACTILE.
17	12	13

And the superior quickness of the Indian, as compared with the Negro, by the following figures of differences.

AUDITORY.	VISUAL.	TACTILE.
14	17	8

Therefore the superior quickness of the Indian, as compared with the White, is shown by the observations to be represented by the following figures of differences.

AUDITORY.	VISUAL.	TACTILE.
31	29	21

Mr. Bache went on to say that, as a paper by him on the subject had been sent to a scientific magazine for publication, he did not deem himself at liberty to add more than that he believes that, other things being equal, the lower the race the quicker is the reaction time. He accounts, he said, for the superiority in quickness of the Indian over the Negro by recognizing that the life of the Indian for thousands of years promoted quickness of reaction, while that of the Negro has tended to slowness. According to his view, he added, the more intellectual the development, the slower ought to be the reaction in all but the product of the higher thought. So far as the observations presented show, the most intellectual of races, the White, exhibits by far the slowest reaction time.

Dr. Cope read his paper on "The Pamunkey Formation of the Chesapeake Region and its Fauna," as announced.

Dr. Brinton described Mr. Cushing's observations on the relics from the caves of France.

Prof. Cope made further observations on the subject.

Dr. Hartshorne made remarks on a recent visit he had made to the Ainos of Japan, supposed by many to have been the original inhabitants of the islands. They are now rapidly dying out and are confined to the northern isles of the archipelago.

Pending nomination No. 1329 was read.

Mr. Du Bois made a verbal report from the Curators in reference to the collection of coins of the Society in deposit at the Pennsylvania Museum.

Dr. Frazer moved that the Curators be requested to continue their identification and examination of the coins before taking a receipt from the Museum, with power to act when satisfied. Carried.

The Tellers reported that the following nominees had received the requisite number of votes, and were therefore duly elected :

- No. 2253. M. Georges Bertin, Paris, France.
 - No. 2254. Marshall D. Ewell, M.D., LL.D., Chicago, Ill.
 - No. 2255. Clarence S. Bement, Philadelphia.
 - No. 2256. George Tucker Bispham, Philadelphia.
 - No. 2257. Joel Cook, Philadelphia.
 - No. 2258. Hon. Mayer Sulzberger, Philadelphia.
 - No. 2259. Frederick D. Stone, Philadelphia.
 - No. 2260. James C. Carter, New York, N. Y.
 - No. 2261. Hon. Edward J. Phelps, New Haven, Conn.
 - No. 2262. Hon. George F. Edmunds, Burlington, Vt.
 - No. 2263. Hon. J. Randolph Tucker, Lexington, Va.
 - No. 2264. M. Marcelin Berthelot, D. es Sc., Paris, France.
 - No. 2265. E. S. Morse, Salem, Mass.
 - No. 2266. Paul Heyse, Munich, Bavaria.
 - No. 2267. Paolo Montegaze, Firenze, Italia.
 - No. 2268. F. W. Putnam, Salem, Mass.
 - No. 2269. Mrs. Zelia Nuttall, Dresden, Saxony.
 - No. 2270. Augustus F. Franks, London, England.
 - No. 2271. George Ebers, Berlin, Prussia.
 - No. 2272. A. Marshall Elliott, Baltimore, Md.
 - No. 2273. Jean Léon Gérome, Paris, France.
 - No. 2274. Willard Gibbs, Ph.D., New Haven, Conn
- After which the Society was adjourned by the President.